

REVAMPING SCHOOL-BASED HEALTH SCREENINGS:

A Community Partnership Yielding
Better Outcomes, Healthier Students



PennState
PRO Wellness

HIGHMARK[®]
FOUNDATION

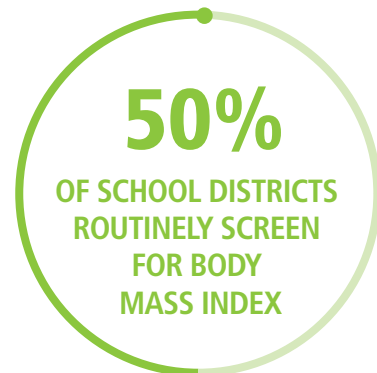
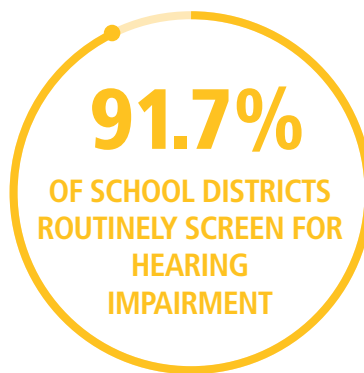
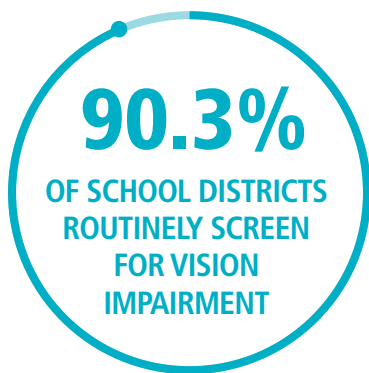
A close-up photograph of a young child with dark hair, resting their head on their hand over a stack of papers. The child's eyes are looking towards the camera with a thoughtful expression. The background is blurred, showing other people in a classroom or school setting.

INTRODUCTION

This paper explores the successful collaboration of Highmark Foundation and Penn State PRO Wellness in bridging an unmet community need with local support through a strategic alliance. These two organizations worked together to identify and facilitate a partnership between a school district with low socioeconomic status, vulnerabilities to health disparities, and a community hospital in an effort to expedite the Pennsylvania Department of Health mandated school health screening process. This collaboration can be replicated in other communities and offers an opportunity for other partnerships that potentially lead to improved health among school children.

THE FACTS

There is little debate that healthier students are better learners. School mandated health screenings are often the best way to uncover issues that may be adversely affecting a student's educational aptitude, such as poor vision or hearing. According to the 2012 School Health Policies and Practices Study, 90.3% of the 1048 districts sampled required routine health screenings for vision impairment; 91.7% had a policy for hearing impairment.¹ As a potential approach to addressing the childhood obesity epidemic, 25 states have also mandated body mass index (BMI) screening in schools.^{1,2} In the majority of cases, health screenings are performed by school nurses.



THE PROBLEM

School-based health screenings require a significant effort by school personnel, often the school nurse. In some schools, it can take up to an entire school year to complete necessary screenings and disseminate results to parents. This results in potential delays in addressing identified health concerns, thus hindering learning. Additionally, the burden accompanied by school health screenings significantly reduces the amount of time nurses have to address more acute student needs. Duquesne City School District nurse Maureen Callas recalls that, working alone, it typically takes her until December to screen all district students. By then, she said, the first half of the school year has passed and necessary items such as glasses could be pushed off in economically struggling homes as something a student will get next year. Imagine an eighth grader coming to school every day struggling to see the blackboard? The repercussions of such an unmet need are far too clear.

“Wellness screenings can identify health risks and cause you to take proper action. It’s important we get the results in the hands of parents in a timely manner so that they can address any needs their child may have.” – Yvonne Cook,

The Highmark Foundation

A photograph of two young girls running happily in a school hallway. The girl on the left has red hair in two long braids and is wearing a pink polo shirt and grey pants. The girl on the right has dark hair in two ponytails and is wearing a light blue polo shirt and dark pants. Both girls are wearing backpacks and are holding hands as they run towards the camera. The hallway is brightly lit with large windows on the left and a door on the right.

A SYNERGISTIC PARTNERSHIP

All nonprofit hospitals are required by federal regulations under the Affordable Care Act, Section 9007, to conduct a community health needs assessment (CHNA) and determine strategies to satisfy unmet needs in the community. The identified need to improve school-based health screenings opens the door to a synergistic partnership between health professionals and local school districts. Nonprofit hospitals can provide a unique resource to school districts by assisting in the timely completion of school-based screenings via a volunteer team of medical staff. The resulting benefit is two-fold. Establishing a partnership between a school and non-profit hospital benefits both parties by fulfilling government-mandated requirements, and more importantly, keeping students healthy, improving student learning and addressing unmet needs in the community.

WHAT WE DID

Funded by Highmark Foundation, Penn State PRO Wellness sought to replicate and test an established model for conducting the school-based health screenings using hospital nursing staff; results from the initial project are reported in a previous publication.³ Briefly, PRO Wellness previously served as a key contributor to an expedited screening process conducted at Lebanon School District in Central Pennsylvania. The revamped screening process utilized clinical assistance from a nonprofit hospital and logistical and technical support from PRO Wellness to reduce school health screenings from months to days, free up time for school nurses to focus on other student health needs and aid in notifying parents about their child's health issues earlier in the school year.

Highmark Foundation, in keeping with its mission to improve individuals' health, well-being and quality of life, and to engage in capacity-building, sustainable efforts in high-need communities, charged Penn State PRO Wellness with implementing the expedited school health screening model across Central and Western Pennsylvania. In September 2015, PRO Wellness facilitated a partnership between Duquesne City School District and neighboring non-profit Jefferson Hospital of Allegheny Health Network to complete the expedited school screenings as a first step. This district was selected based upon number of students receiving free and reduced lunch qualification and location of the school in an economically disadvantaged community, which may indicate poor health of students and increased demand on the school nurse. Jefferson Hospital was selected based on its proximity to the school.

Penn State PRO Wellness navigated the two-day screening event by providing technical and logistical support. An orientation with hospital staff and the school nurse included training on screening machines, procedures on recording results, standards of confidentiality, sensitivity to student health data, and an overview about the school's dynamics and its students. Nursing staff from Jefferson Hospital, along with key personnel from Penn State PRO Wellness, collaborated with the Duquesne City school nurse to conduct the screenings. Students visited a specific "station" for vision, hearing, height, weight and scoliosis assessments. Screening data was recorded for every student, identifying children who were overweight or obese, in need of glasses, needing follow up hearing evaluations, and those screening positive for scoliosis. Parent notification letters of screening results were generated and distributed with recommendations for next steps.

“Meeting our students’ basic needs is a constant concern for all of us. With this [collaborative] health screening, so many of our students will receive services sooner than they ever could have prior to this event.”

– Jennifer M. Jennings,
Building Principal, Duquesne City School
District

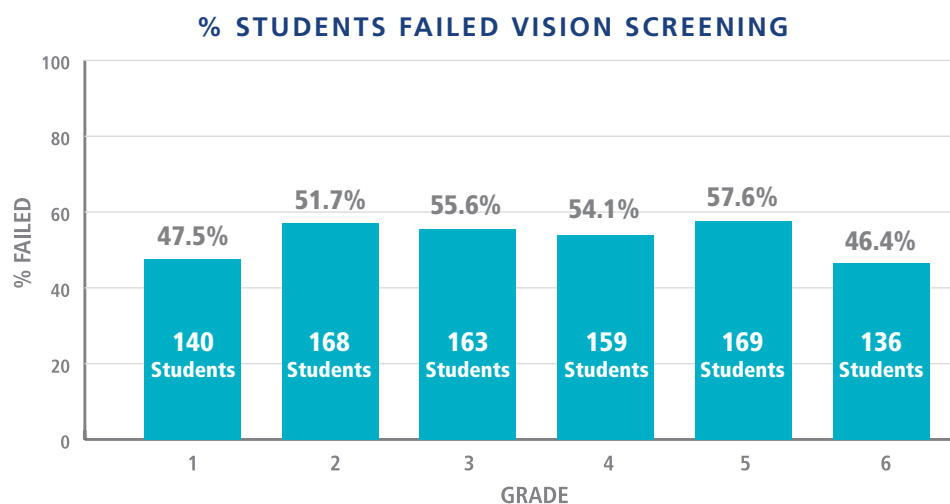


THE RESULTS

A total of 14 hospital nurses and six PRO Wellness staff participated in the two-day expedited health screening event. During the screening process, 294 students (73.5% of the total estimated 400-student population) were measured for height and weight, 286 were screened for vision and 198 were screened for hearing (Note: not all grades are measured for hearing per state requirements). Of the students (n=294) screened for height and weight, 38.8% of students were screened as overweight (14.3%; n=42) or obese (24.2%; n=71). Among the 286 students screened for vision, 46.2% (n=132) failed the screening and required follow-up testing. A total of 198 students in kindergarten through third grade were also screened for hearing, and 8.6% failed. All sixth grade students (n=30) were screened negative for scoliosis. The school nurse followed up with students who were absent during the screening process so that all children were evaluated.

VISION SCREENING – LET’S TAKE A CLOSER LOOK

Uncorrected vision appears to be a critical health issue for Duquesne City School District. There are an alarming number of students across all grades within the district who are in need of prescription eye glasses. One second grader admitted during the screening, “I had glasses but I lost them,” adding she isn’t sure when the pair went missing but it was sometime during the last school year. “I can’t see far, far away.” Unfortunately, this was also the distance of the classroom blackboard.

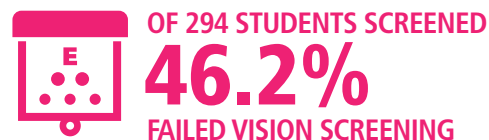
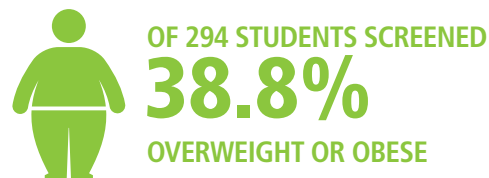


CORRECTIVE ACTION TO CORRECTING VISION

Impaired vision is most damaging in the elementary years because it is during these grade levels that the foundations for learning are established.⁴ Additionally, a child’s educational, social and emotional development is compromised by vision impairments.⁴ Early detection and correction of vision problems can ensure that students reach their full academic potential.

Efforts have been made by Duquesne City School District to remedy the increasing rates of vision impairment of its students. A protocol for follow-up visual testing was set in place for students who failed the vision testing at the expedited health screening day event. Briefly, all failed screens were compared against previous screening data. Students were rescreened by the district school nurse if their most recent vision results were borderline, if they failed most recently but had passed previously, or if they had a greater failure since their last screening (i.e. this year failed at 20/70, last year failed at 20/40). Parent notification letters were generated and distributed, detailing the specific screening results which included a referral letter for physician evaluation.

Additionally, the district partnered with an eyewear company to provide free eyeglasses to students who failed the vision screening. Advertisements regarding the in-school vision service were marketed school-wide to make glasses more accessible to students. Families who did not respond to the offer for free glasses were contacted again by the school nurse as another attempt to reach out to families of students in need of corrective lenses. Future plans include reaching out to families over the summer if they still need glasses for their child as well as rescreening students upon return in the 2016/2017 school year. As an ongoing responsibility, the district manages a continuous upkeep on glasses, repairs and replacements as needed for its students.





WHY IT WORKED

The revamped school health screening model is an effective way to expedite the mandated school screenings and also satisfy CHNA requirements for nonprofit hospitals. Expedited screenings, occurring early in the school year, allow for student health needs to be addressed in a timely manner. Additionally, this streamlined screening process removes the burden from, in some cases, a single school nurse, so that the day-to-day health needs of students can also be effectively managed. PRO Wellness has since successfully replicated these partnerships for screenings in other communities including Steelton and Allentown, Pennsylvania and presented this model at statewide meetings so that partnerships can be forged by others.

LESSONS LEARNED INFORM FUTURE SUSTAINABILITY

The success of the expedited school health screening process was largely the result of committed partners including the school nurse, school administration, hospital leadership, chief nursing officer and nurse volunteers, who made this effort possible. The nurse volunteers from Jefferson Hospital described the day as fulfilling and something they would like to repeat annually. The experience was contagious and led to other charitable projects such as the collection of personal hygiene products by hospital nurses and their friends for distribution by the school nurse to students in need. It is reported by both the school and the hospital that this partnership to assist with school screenings will continue in future years.

Lessons learned include the acknowledgement of logistical considerations for future screening events. There was upfront coordination and planning required of the school nurse (for example, class schedules for coming down to screenings, screening forms printed and distributed to classes, reminder instructions printed next to the screening machines). Additionally, flexibility in meeting school needs is very important. A noteworthy example is the flow of the health screening process. At a previous screening performed at another school, the use of a gymnasium allowed students to move freely from station to station in an open space. In contrast, the Duquesne City School District floor plan necessitated small room-to-room screening stations and called for greater management of students transitioning through the stations. Variables such as screening space, number of school buildings, student population and possible language and environmental barriers will require adjustments to the expedited screening model to fit the individual needs of each school.

Based on PRO Wellness' experience in developing these partnerships, it is important to recognize the up-front planning that is required in the identification of schools and hospitals and the ensuing coordination to explain the model and identify dates for screening that work for both parties. In addition, the project was a new challenge for PRO Wellness because, unlike other screening partnerships coordinated, this one occurred approximately four hours from the PRO Wellness office, which introduced logistical considerations. It is perhaps easier for local schools that have local connections with hospitals to forge relationships, which should encourage others who are interested in establishing these partnerships. Finally, PRO Wellness has a history of improving school health screening in impactful ways; having developed, tested and disseminated the official Pennsylvania state BMI notification letter to parents, and demonstrated partnerships to expedite school screenings between schools and hospitals.

Partners, which include the school nurse, school administration, hospital leadership, chief nursing officer and nurse volunteers, made this effort possible.



ACKNOWLEDGEMENTS

We would like to thank the following organizations for making this project possible:

Highmark Foundation

Jefferson Hospital leadership and nurse volunteers:

Booher, Denise M.

Cheesebrough, Jennifer L.

Corley, Reneelyn X.

Coulter, Jewel M.

Dunn, Suzan M.

Gnora, Pamela M.

Hynes, Tracey L.

Janosko, Rebecca A.

Konick, Beth M.

Lako, Victoria J.

Noble, Jamie L.

Sheriff, Dina M.

Susick, Kelsey A.

Urban, Louise A.

Joy M. Peters, DNP, RN, MSN, MBA, NEA-BC
Vice President of Patient Care Services & CNO
Jefferson Hospital
Allegheny Health Network

Duquesne City School District

Maureen J. Callas RN, MEd, BSN, CSN
School Nurse

Jennifer M. Jennings, M.Ed
Building Principal

Health eTools

Robert Gillio, MD
CEO Population Health Innovations, LLC

Jeff Coble
Director of Support Services
Health eTools

ABOUT HIGHMARK FOUNDATION

Highmark Foundation is a private 501(c)(3) tax-exempt, charitable organization of Highmark Inc. that supports initiatives and programs aimed at improving community health. The Foundation's mission is to improve the health, well-being and quality of life for individuals who reside in the communities served by Highmark Inc. The Foundation strives to support evidence-based programs that impact multiple counties and work collaboratively to leverage additional funding to achieve replicable models. For more information, visit highmarkfoundation.org.

ABOUT PENN STATE PRO WELLNESS

Penn State PRO Wellness is committed to educating and inspiring youth and their families to eat well, engage in regular physical activity, and become champions for bringing healthy choices to life by providing healthy eating and active living strategies to approximately 800 schools in Pennsylvania, as well as communities and corporate business partners. Advised by over 50 corporate, government and academic officials, the center is highly visible in the health and wellness arena and positioned as a statewide thought leader in obesity prevention. As an integral component of Penn State Health Milton S. Hershey Medical Center's community service mission, our approach of prevention, research and outreach provides schools, communities and like-minded organizations with program development and implementation, assessment and evaluation, capacity building, technical assistance, collaborative partnerships and access to proven wellness interventions. For more information, visit pennstatehershey.org/PROwellness.

REFERENCES

1. Centers for Disease Control and Prevention. Results from the School Health Policies and Practices study 2012. Atlanta (GA): US Department of Health and Human Services; 2013.
2. Ruggieri DG, Bass SB. A comprehensive review of school-based body mass index screening programs and their implications for school health: do the controversies accurately reflect the research? *J Sch Health*. 2015;85: 61-72.
3. Hoke AM, Kephart DK, Dillon JF, McCullough JR, Blatt BJ, Kraschnewski JL. Improving Community Health While Satisfying a Critical Community Need: A Case Study for Nonprofit Hospitals. *Prev Chronic Dis* 2015; 12:150230. DOI: <http://dx.doi.org/10.5888/pcd12.150230>.
4. <http://pennsylvania.aoa.org/documents/PA-DOH-SchVisScr-Proc.pdf>



PennState
PRO Wellness

Champions for bringing
healthy choices to life.

HIGHMARK[®]
FOUNDATION

for more information please visit:

PENNSTATEHERSHEY.ORG/PROWELLNESS

PHONE: 717.531.1440